

# **Organic Compound and Metal Ion Synergistic Disinfection and Purification System and**

## **Method of Manufacture**

### **ABSTRACT**

5           A new, novel and useful disinfection and purification system comprised of organic compounds in synergistic action with selected metal ions and method of manufacture and use. One of the benefits that is derived from this system is the ability to quickly and easily treat a surface, fluid or medium for disinfection of bacteria, fungi, viruses, algae and protozoans, with a non-toxic, non-chlorinated mixture that effectively kills all such organisms in minutes or hours.

10       The disinfection and purification system remains effective for long periods of time maintaining its disinfection capacity making it highly effective for stored or transported mediums such as potable drinking water. The disinfection and purification system may be incorporated with carbon block or membrane filters to disinfect filtered liquids such as water to render it potable. The disinfection and purification system may be infused into semi-permeable surfaces or applied to non-porous

15       surfaces such that the disinfectant compounds of the system would be delivered to surface of an object to be disinfected by leaching, capillary action, mere contact, water activation and/or osmosis/diffusion.